

U.S. Patent Application Serial No. 10/797,559  
Response filed June 20, 2006  
Reply to OA dated March 20, 2006

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claim 1 (canceled)

Claim 2 (canceled)

Claim 3 (canceled)

Claim 4 (canceled)

Claim 5 (Currently Amended): A shaft for rotatably supporting a roller wheel, the shaft comprising:

end portions having the roller fitted therebetween; and

a middle portion having the roller fitted thereon, the middle portion having a connection portion that extends along a diametrical direction of the shaft and further having recess portions ~~on sides thereof~~ at symmetrical positions with respect to a shaft axis,

wherein the shaft receives a load from the roller ~~toward~~ along the diametrical

U.S. Patent Application Serial No. 10/797,559  
Response filed June 20, 2006  
Reply to OA dated March 20, 2006

direction of the shaft, and

wherein the cross-section of the middle portion of the shaft includes an upper portion and a lower portion each of which receives the load from the roller, and the connection portion connecting the upper and lower portions.

Claim 6 (Currently Amended): The shaft as in claim 5, wherein the diametrical direction to which the shaft receives the load from the roller is a vertical direction, ~~wherein a cross-section of the middle portion of the shaft includes an upper circular portion, a lower circular portion and the connection portion that extends vertically; and~~ wherein the connection portion ~~connects the upper and lower circular portions~~ extends vertically and passes through the shaft axis.

Claim 7 (Canceled)

Claim 8 (Previously Presented): The shaft as in claim 5, wherein each of the recess portions of the middle portion of the shaft has an opening that extends horizontally from the vertically extending connection portion, the opening becoming smaller as it extends toward the end portions of the shaft.